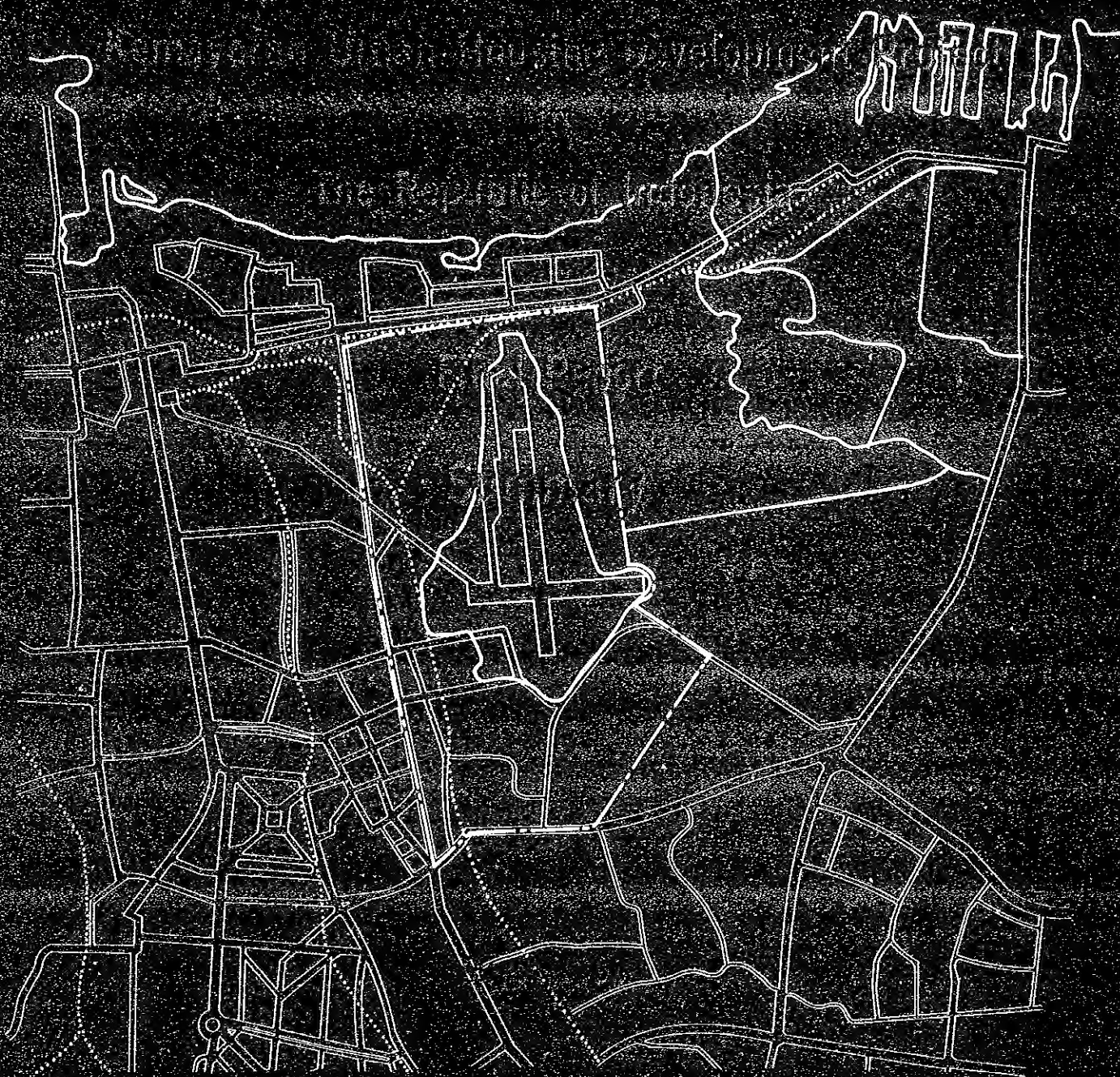




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**Master Plan and Feasibility Study  
on  
Kemayoran Urban Housing Development Project  
in  
The Republic of Indonesia**

**Final Report**

**Summary**

**March, 1990**

**Japan International Cooperation Agency**

国際協力事業団

21304

## PREFACE

In response to a request from the Government of Indonesia, the Japanese Government decided to conduct a Master Plan and Feasibility Study on Kemayoran Urban Housing Development and Renewal Project and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent to Indonesia a survey team headed by Mr. Koomi Noda, composed of members from Yachiyo Engineering Co., Ltd. and JCP Inc. from August 1988 to January 1990.

The team held discussions with concerned officials of the Government of Indonesia, and conducted field surveys. After the team returned to Japan, further studies were made and the present report was prepared.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Indonesia for their close cooperation extended to the team.

March, 1990



---

Kensuke Yanagiya

President

Japan International Cooperation Agency





## TABLE OF CONTENTS

|             |                                                            |    |
|-------------|------------------------------------------------------------|----|
| CHAPTER I   | INTRODUCTION .....                                         | 1  |
|             | 1. OBJECTIVES AND SCOPE OF THE STUDY .....                 | 2  |
|             | 2. PERFORMANCE OF THE STUDY .....                          | 8  |
| CHAPTER II  | CONCEPT OF URBAN HOUSING RENEWAL IN KEMAYORAN AREA .....   | 11 |
|             | 1. OBJECTIVES AND CONTENTS OF THE STUDY .....              | 12 |
|             | 2. CHARACTERISTICS OF THE STUDY AREA .....                 | 13 |
|             | 3. ZONE 1 (EX-AIRPORT SITE) DEVELOPMENT .....              | 16 |
|             | 4. HOUSING RENEWAL OF THE STUDY AREA .....                 | 18 |
| CHAPTER III | INTEGRATED DEVELOPMENT OF ZONE 2 .....                     | 21 |
|             | 1. GENERAL FRAMEWORK .....                                 | 22 |
|             | 2. HOUSING DEVELOPMENT BY PRIVATE SECTOR .....             | 23 |
|             | 3. HOUSING DEVELOPMENT BY PERUMNAS .....                   | 24 |
|             | 4. INTEGRATED DEVELOPMENT AND RENEWAL .....                | 26 |
|             | 5. HOUSING RENEWAL IN ZONE 4 .....                         | 28 |
|             | 6. SPECIFIC INFRASTRUCTURE RECOMMENDATION .....            | 29 |
|             | 7. NEIGHBORHOOD FACILITY .....                             | 29 |
|             | 8. HOUSING UNIT CATALOGUE .....                            | 31 |
| CHAPTER IV  | URBAN HOUSING RENEWAL AT CASE STUDY AND PRIORITY SITE .... | 33 |
|             | 1. SELECTION OF CASE STUDY SITE AND PRIORITY SITE .....    | 34 |
|             | 2. FRAMEWORK OF THE CASE STUDY .....                       | 36 |
|             | 3. RENEWAL PLAN OF EACH CASE STUDY AND PRIORITY SITE ....  | 40 |
|             | 3.1 SITE A (CASE STUDY SITE) .....                         | 40 |
|             | 3.2 SITE B (CASE STUDY AND PRIORITY SITE) .....            | 42 |
|             | 3.3 SITE C (CASE STUDY SITE) .....                         | 48 |
|             | 3.4 SITE D (CASE STUDY AND PRIORITY SITE) .....            | 50 |
|             | 3.5 SITE E (CASE STUDY AND SITE) .....                     | 56 |
|             | 3.6 SITE B (CASE STUDY SITE) .....                         | 58 |
| CHAPTER V   | CONCLUSION AND RECOMMENDATION .....                        | 61 |
|             | 1. CONCLUSION .....                                        | 64 |
|             | 2. RECOMMENDATION .....                                    | 65 |



# CHAPTER I

## INTRODUCTION



## 1. OBJECTIVES AND SCOPE OF THE STUDY

### 1.1 GENERAL BACKGROUND

At present, Jakarta City has a population of more than 8 million (6.5 million according to the 1984 census), and the population of this city in 2005 is estimated to reach 12 million. With the rapid increase of population, delay in the supply of housing and improvement of living environment tend to occur creating one of the major urban problems. To overcome this situation, effective use of land and the existing facilities is the most important concern.

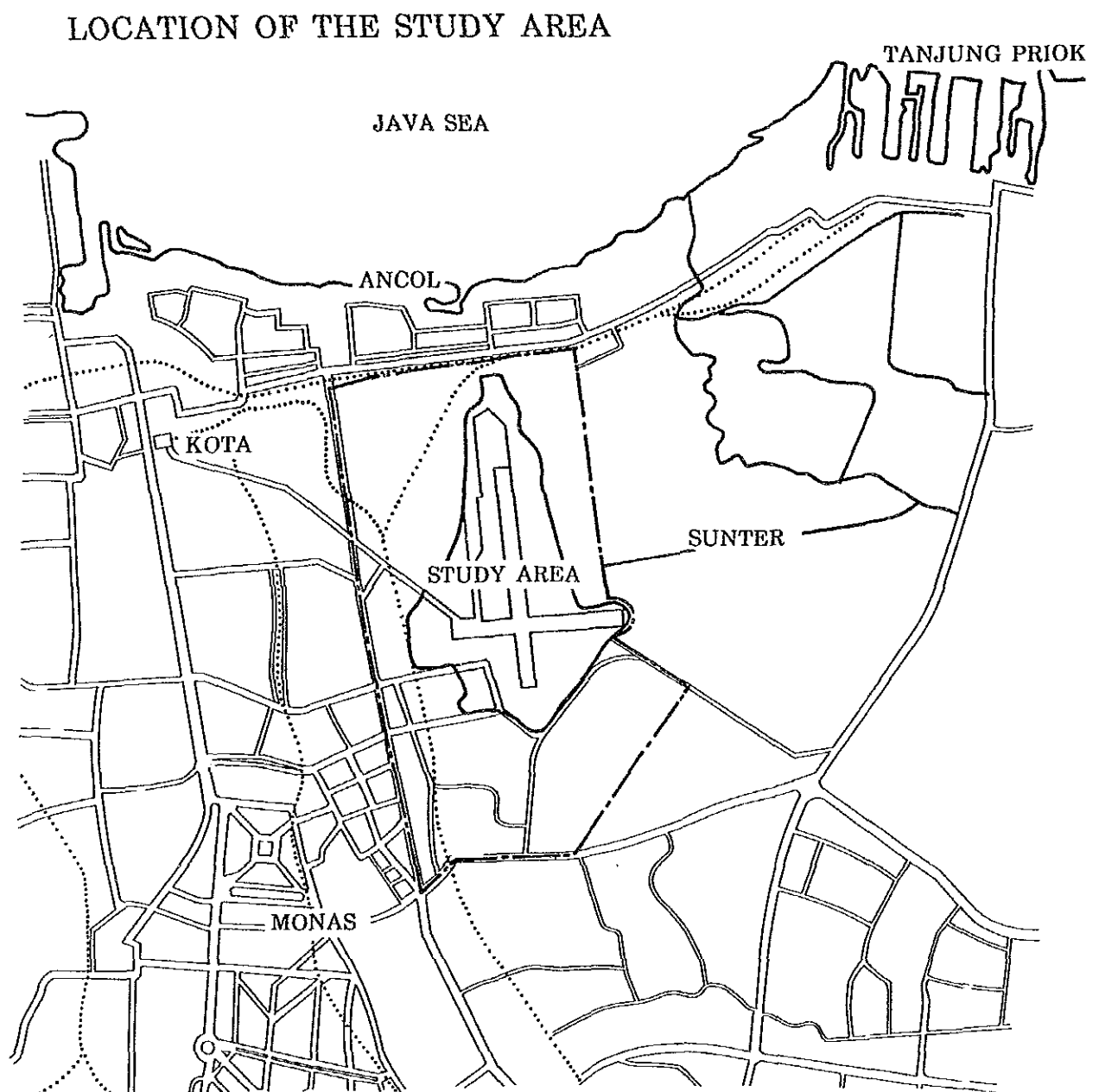
Kemayoran ex-airport site, having an extensive area of more than 400 ha., is located in the proximity of the central part of Jakarta, and therefore, Kemayoran area has a high potential for urban renewal including improvement of living environment.

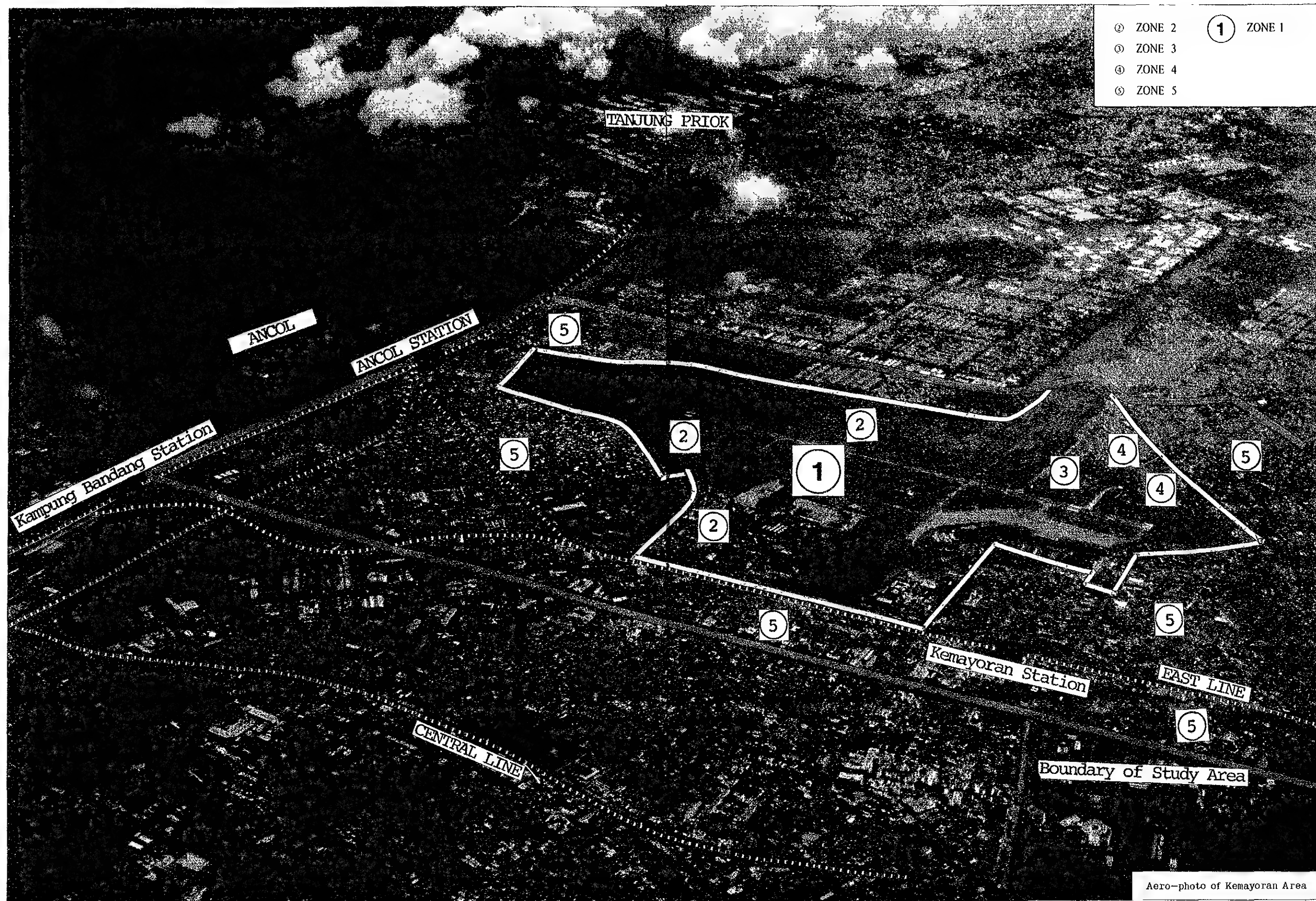
In consideration of this background, the Ministry of Public Works, the Republic of Indonesia, represented by the Directorate General of Human Settlement (hereinafter referred to as DJCK), has requested the technical cooperation of the Government of Japan regarding urban renewal of Kemayoran ex-airport site and its vicinity. The Japan International Cooperative Agency (hereinafter referred to as JICA) agreed with DJCK on the contents of the technical assistance as stipulated in the Scope of Work signed by them on April 14, 1988.

### 1.2 OBJECTIVES OF THE STUDY

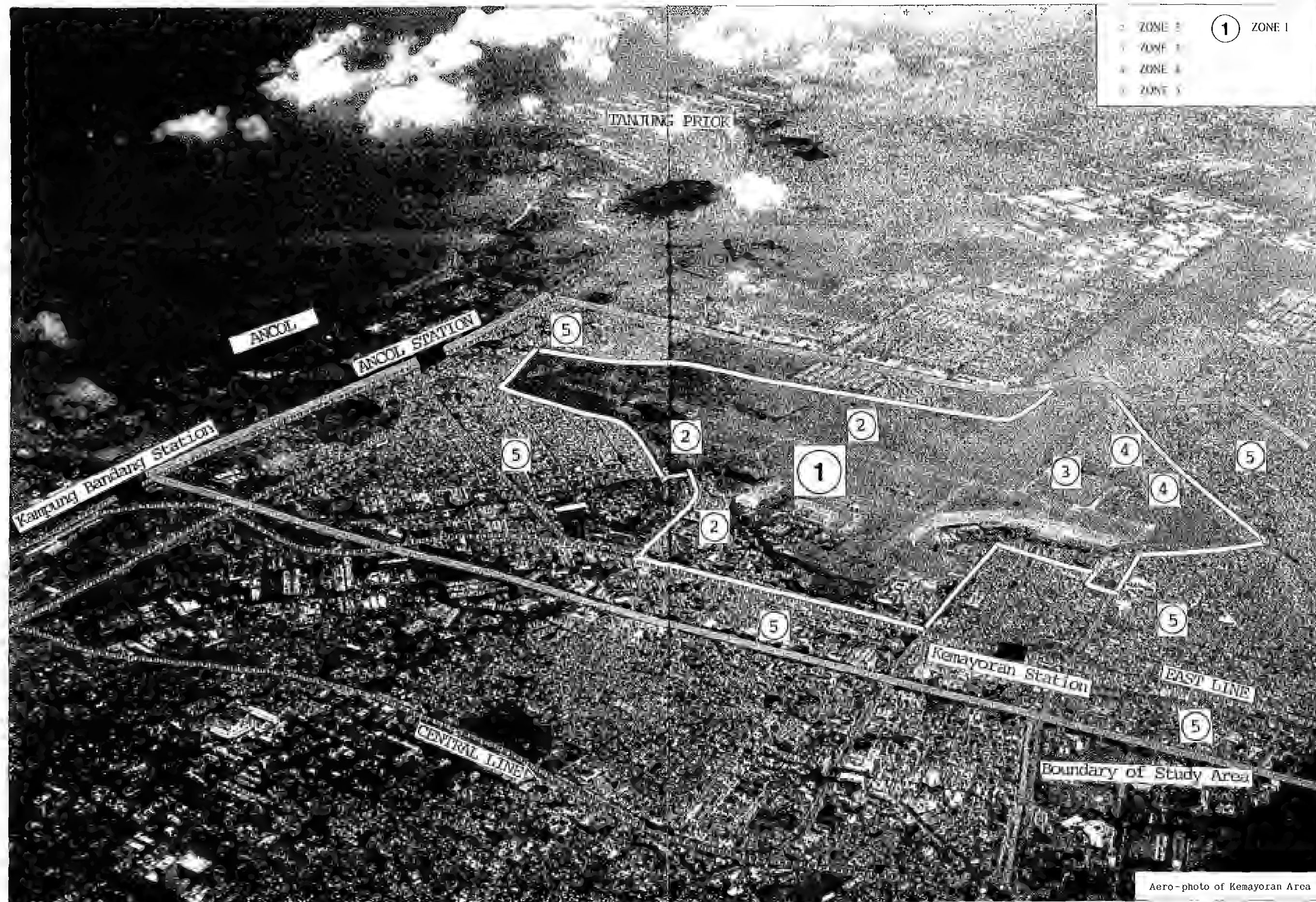
The objectives of the Study are as follows:

- 1) Formulation of an integrated development plan.
- 2) Methodology development of urban renewal in Indonesian metropolitan areas.
- 3) Conduct of feasibility study on urban housing and urban renewal.
- 4) Provision of dissemination materials on urban renewal.
- 5) Conduct of technology transfer for this Study through joint work with the Indonesian counterparts.









### 1.3 SCOPE OF THE STUDY

1) Formulation of Integrated Development Plan for Zone 2:

This includes macro analysis of Jakarta City and the vicinity of the Study Area (Zone 5 and Zone 1) in order to identify the characteristics of the Study Area for setting up a concept of Zone 2 development. Zone 2 consists of high, middle and low income groups housing and neighborhood facilities.

2) Development of Urban Renewal Methodology for Zone 4 and Zone 5:

Zone 4 and Zone 5 renewal strategies shall be formulated through the study of renewal model plans for six selected Case Study Sites. The development of renewal methodology in the case studies shall be considered as applicable to other built up areas in big cities in Indonesia. Manual of urban housing renewal methods is to be prepared based on the results of the case studies.

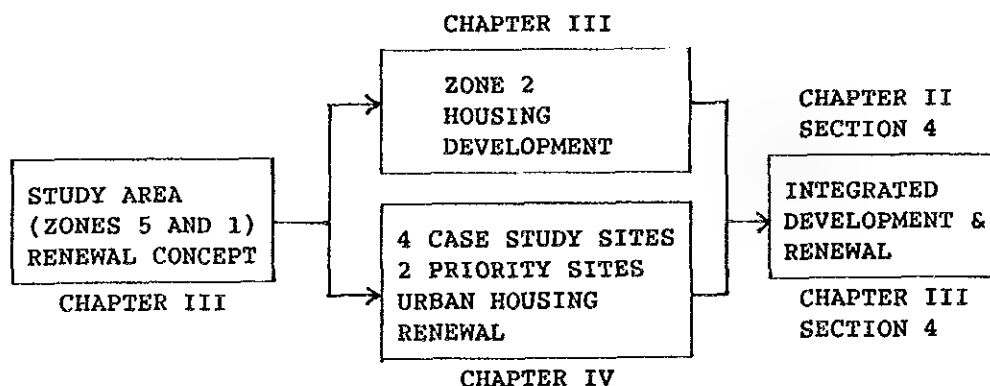
3) Conduct of Feasibility Study

Preliminary feasibility study shall be conducted for Zone 3 development (Perumnas Housing) and Priority Sites which are to be selected from among the 6 Case Study Sites.

4) Provision of Dissemination Material on Urban Renewal

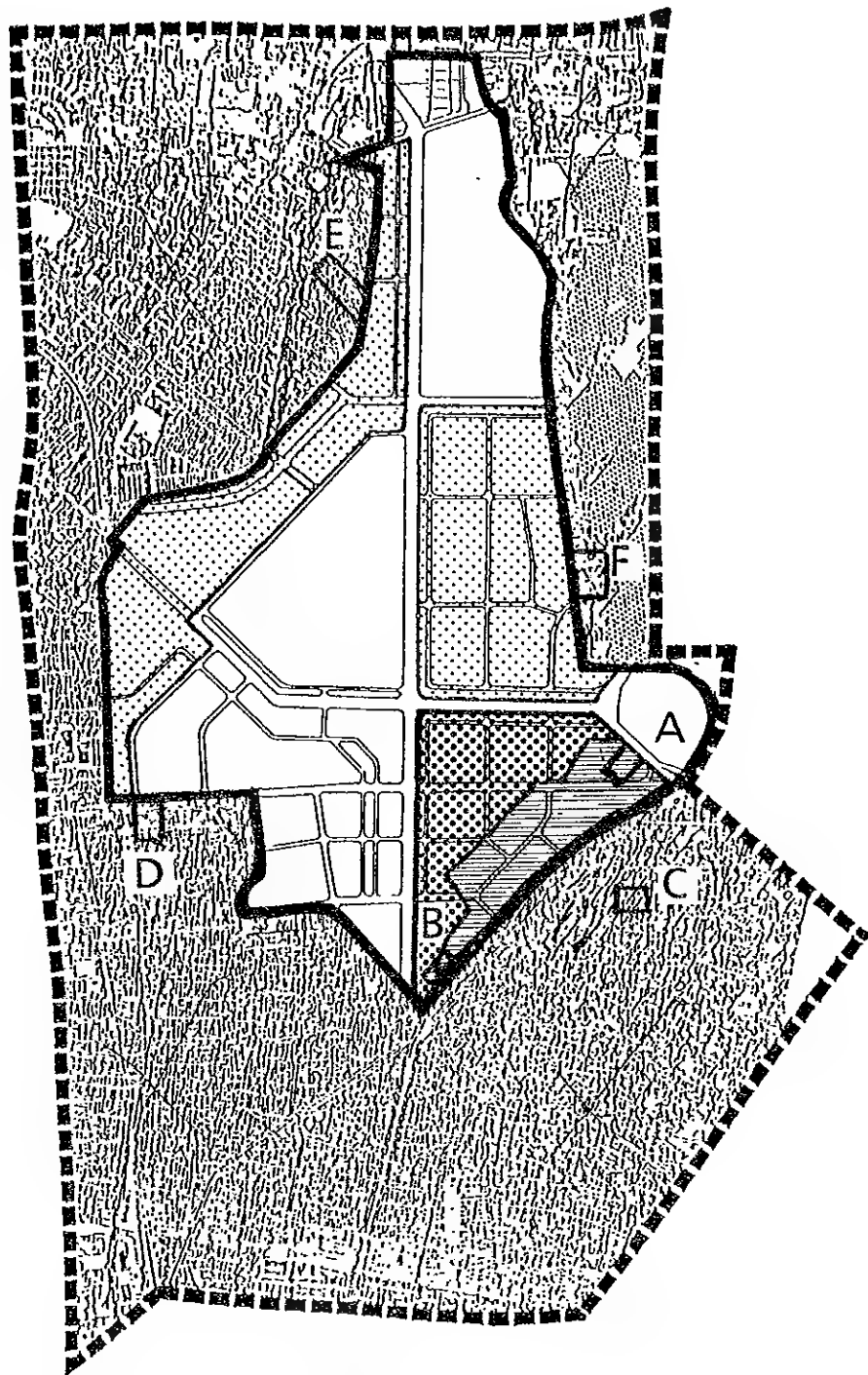
Four editions of slides synchronized with sound are to be produced and presented at Seminars for introducing this Study particularly focusing on technical issues of the Study.

#### STUDY FLOW AND COMPOSITION OF CHAPTERS OF THIS REPORT





# ZONNING OF THE STUDY AREA



- 
 ZONE 5 : Vicinity of Kemayoran ex-airport area
- 
 ZONE 1 : Airport Site
- 
 ZONE 2 : Housing and Neighbourhood Facility
- 
 ZONE 3 : Perumnas Housing Area
- 
 ZONE 4 : Built up Area in Zone 3

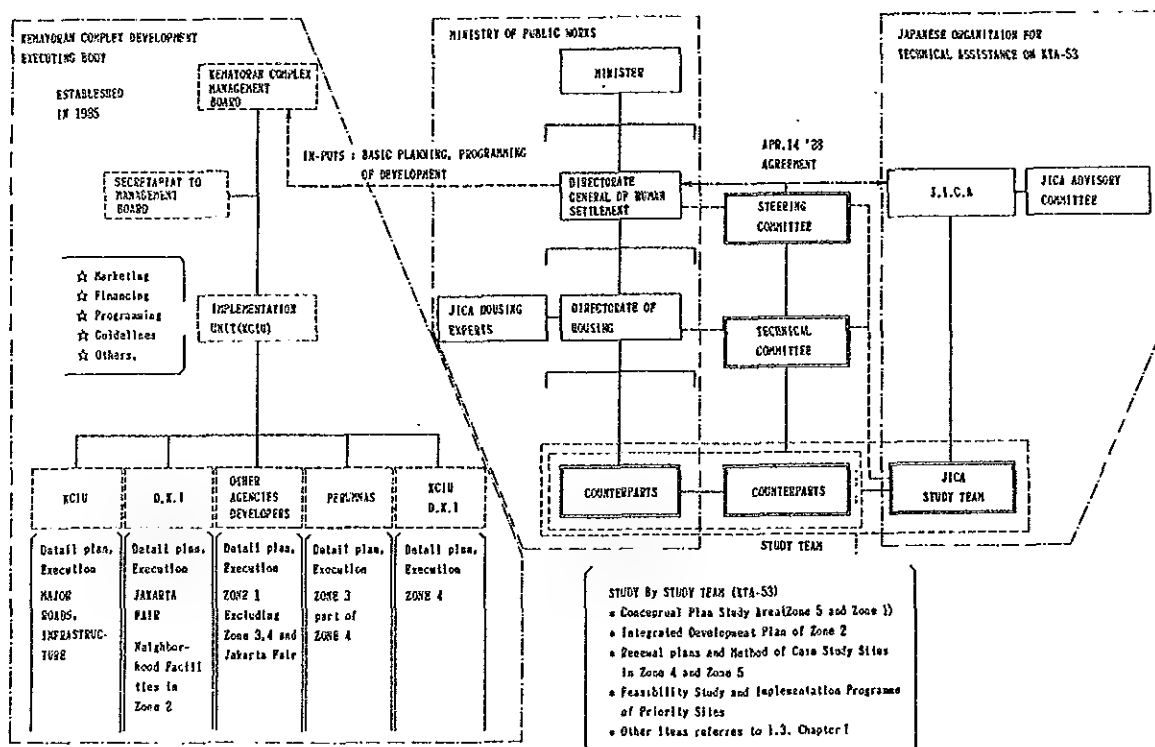
## 2. PERFORMANCE OF THE STUDY

### 2.1 ORGANIZATION OF THE STUDY

The JICA Study Team composed of several experts and Indonesian Counterparts formed the Study Team. DJCK organized Steering Committee and Technical Committee for confirmation of all technical issues studied by the Study Team. Steering Committee meetings and Technical Committee meetings were held 5 and 8 times, respectively. JICA organized the Advisory Committee which advised the JICA Study Team through meetings convened 14 times in Tokyo.

DJCK has related the recommendations derived from the Study, in parts and as a whole, to the concerned bodies such as Kemayoran Complex Management Board (KCMB)/Implementation Unit (KCIU), Perum Perumnas, and DKI Jakarta Municipality who are responsible for the implementation of Zone 1 development, Zone 3 development, and Zone 5 renewal respectively.

The organization chart shows the relationship between the JICA Study and Kemayoran Complex Development Project.



## 2.2 WORK SCHEDULE OF THE STUDY

The Study has been implemented as shown below.

| PHASE              | PHASE 1                                     |   |   |           |    |    |    |                      |   |   |             |   | PHASE 2                             |   |   |                                     |    |    |    |                |                                     |   |  |  |                          |  |  |
|--------------------|---------------------------------------------|---|---|-----------|----|----|----|----------------------|---|---|-------------|---|-------------------------------------|---|---|-------------------------------------|----|----|----|----------------|-------------------------------------|---|--|--|--------------------------|--|--|
| YEAR               | 1988                                        |   |   |           |    |    |    |                      |   |   |             |   | 1989                                |   |   |                                     |    |    |    |                |                                     |   |  |  | 1990                     |  |  |
| MONTH              | 6                                           | 7 | 8 | 9         | 10 | 11 | 12 | 1                    | 2 | 3 | 4           | 5 | 6                                   | 7 | 8 | 9                                   | 10 | 11 | 12 | 1              | 2                                   | 3 |  |  |                          |  |  |
| STEP               | STEP.1                                      |   |   | STEP.2    |    |    |    | STEP.3               |   |   | STEP.4      |   |                                     |   |   | STEP.5                              |    |    |    |                |                                     |   |  |  |                          |  |  |
| WORK PLACE         | TOKYO <input type="checkbox"/>              |   |   |           |    |    |    |                      |   |   |             |   | <input type="checkbox"/>            |   |   |                                     |    |    |    |                |                                     |   |  |  | <input type="checkbox"/> |  |  |
|                    | JAKARTA <input checked="" type="checkbox"/> |   |   |           |    |    |    |                      |   |   |             |   | <input checked="" type="checkbox"/> |   |   | <input checked="" type="checkbox"/> |    |    |    |                | <input checked="" type="checkbox"/> |   |  |  |                          |  |  |
| SUBMMISSION REPORT | ○ INCEPTION                                 |   |   | ○ I/R (I) |    |    |    | ○ I/R (II)           |   |   | ○ I/R (III) |   |                                     |   |   | ○ DRAFT FINAL                       |    |    |    | ○ FINAL REPORT |                                     |   |  |  |                          |  |  |
| MAJOR MEETINGS     | ○ S/C.1                                     |   |   | ○ S/C.2   |    |    |    | ○ S/C.3<br>⊠ SEMINAR |   |   | ○ S/C.4     |   |                                     |   |   | ○ S/C.5<br>⊠ SEMINAR                |    |    |    |                |                                     |   |  |  |                          |  |  |

## 2.3 CONSIDERATION

### 2.3.1 General Consideration

The nature of either planning or implementation of urban renewal is significantly different from that of infrastructure development or the like. It very much involves socio-economic aspects, and renewal itself should proceed on the basis of "Consent" of all parties concerned, requiring periodic revisions and adjustments.

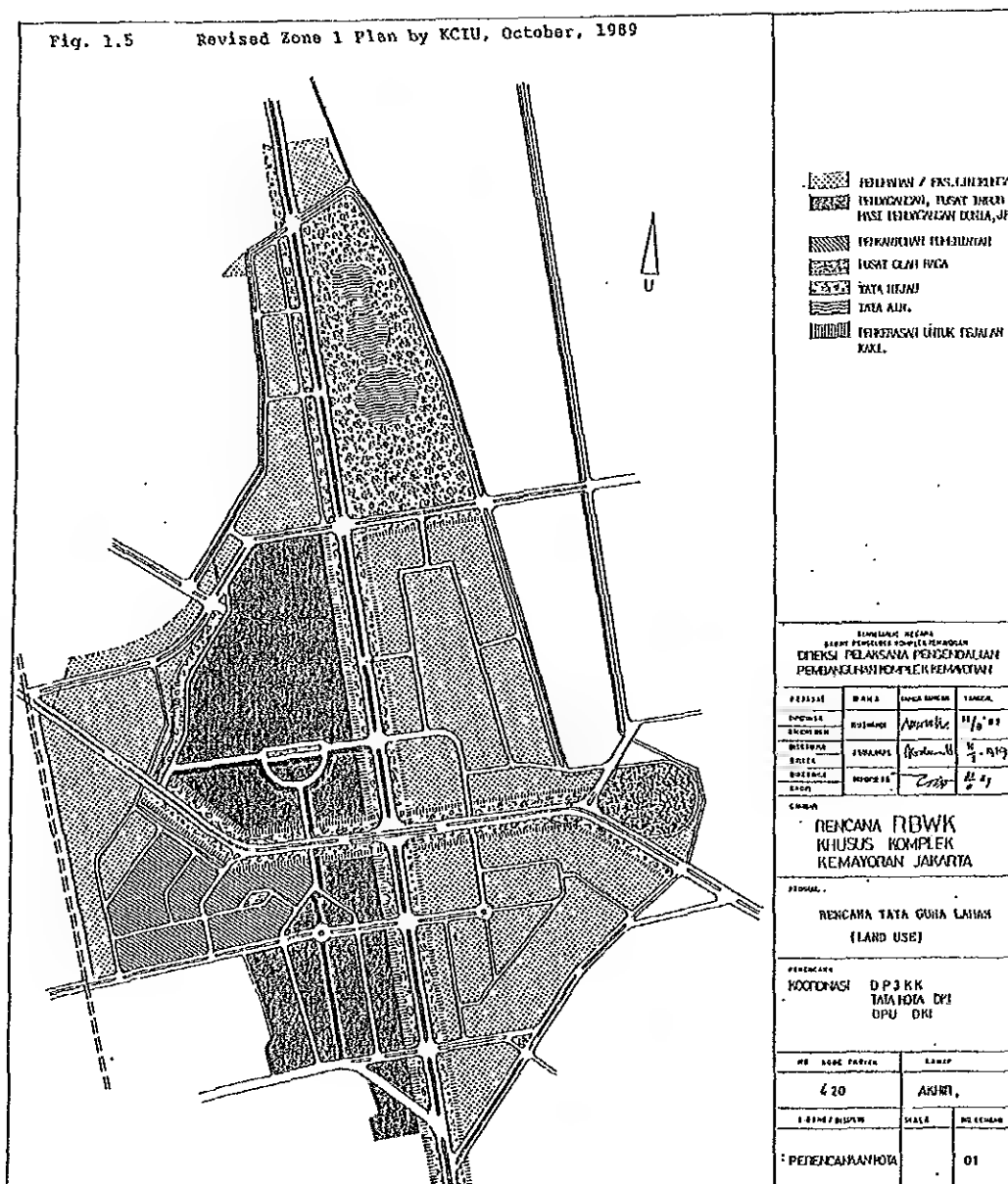
The Study is based on the Master Plan of Zone 1 prepared in 1987, but the required task is the development of Zone 2 only for which study has been carried out simultaneously to the actual implementation of all of Zone 1 by KCIU and Zone 3 housing development by Perumnas.

The Study identifies executing bodies of urban housing renewal in 4 Case Study Sites in Zone 5. DKI Jakarta Municipality is, in general, responsible for urban renewal of Zone 5.

### 2.3.2 Particular Considerations

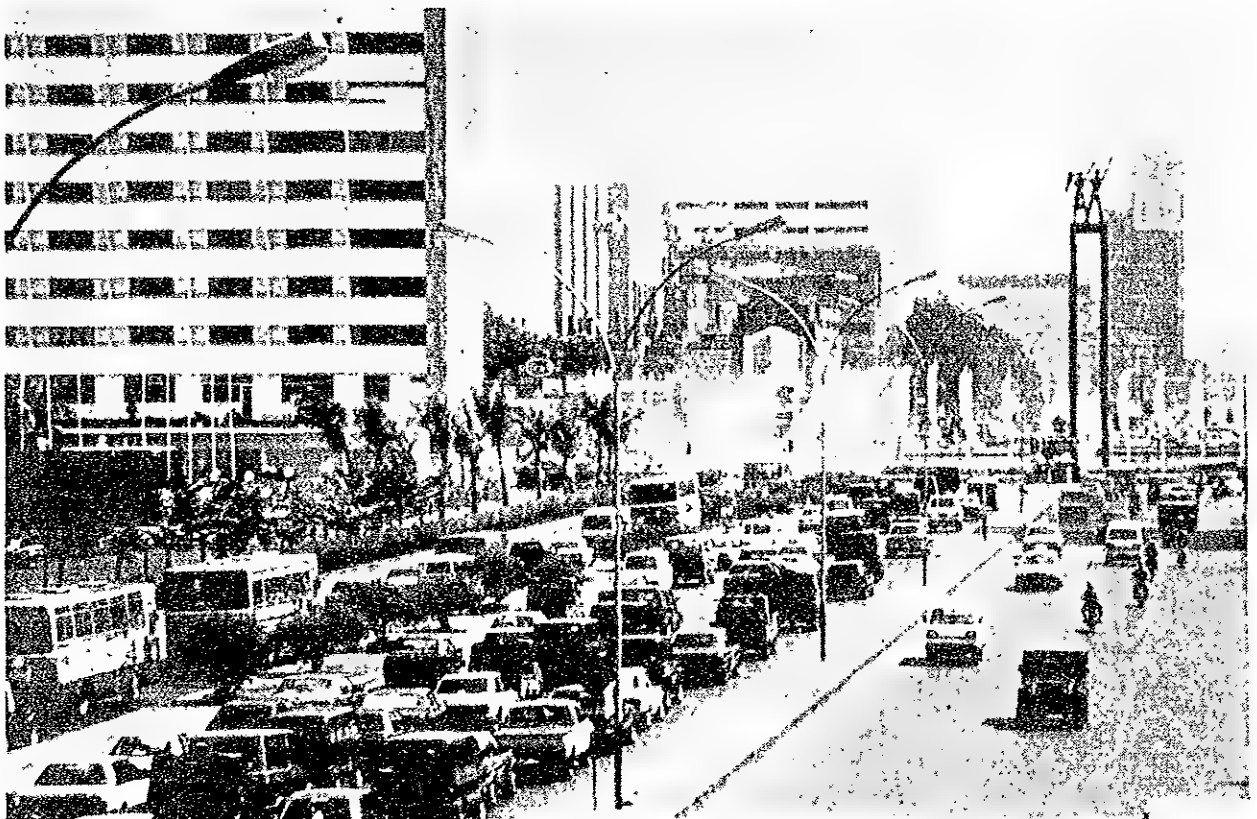
This Study is not incorporated with the latest revised policy or plan of Perum Perumnas and KCIU for the development of Zone 3 and Zone 1 respectively. Perumnas changed its generally confirmed policy after August, 1989, and KCIU revised road network plan of Zone 1 (shown below) which was authorized in December, 1989. However, the contents of the Final Report including systems, guidelines and considerations are still useful for further development or adjustment of the implementation of both by Perumnas and KCIU.

REVISED ZONE 1 MASTER PLAN BY KCIU, DECEMBER, 1989



## CHAPTER II

### CONCEPT OF URBAN HOUSING RENEWAL IN KEMAYORAN AREA



## 1. OBJECTIVES AND CONTENTS OF THE STUDY

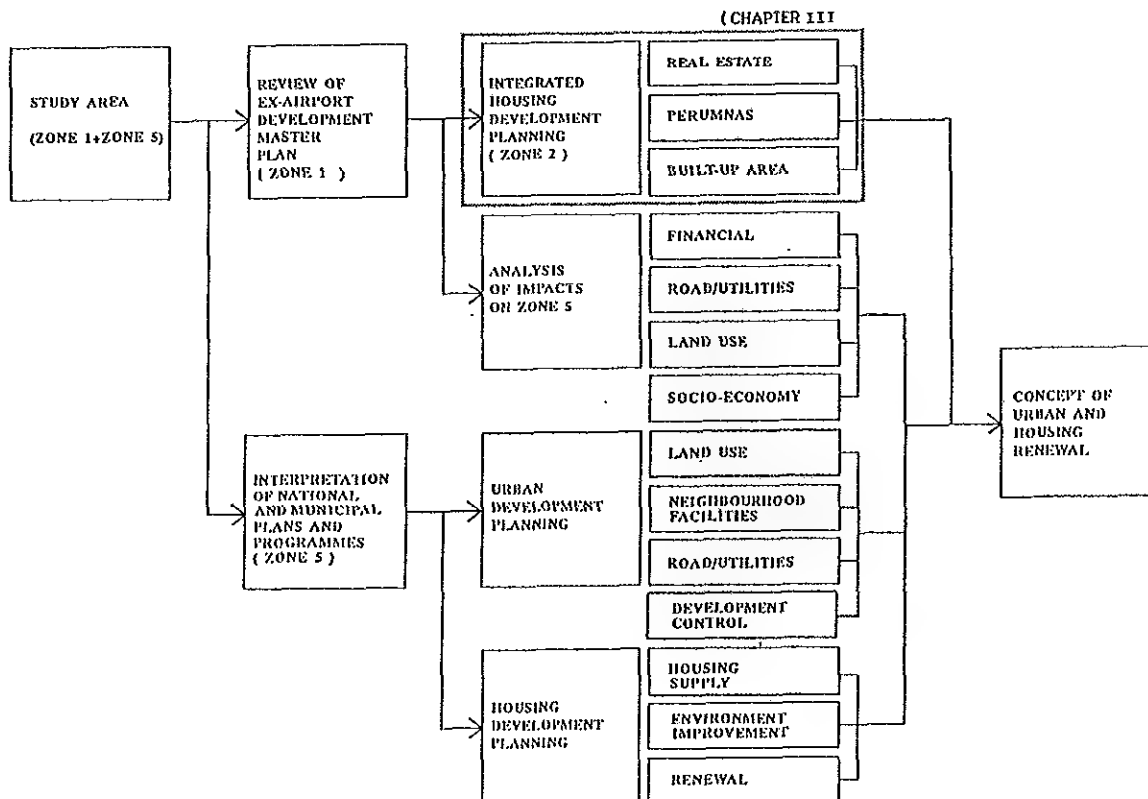
### 1.1 OBJECTIVES OF THE STUDY

The objectives of the study in this Chapter are to identify the Study Area's characteristics and to set up the concept of urban housing renewal in the Study Area.

### 1.2 CONTENTS OF THE STUDY

The Study is to be carried out on the major aspects shown below.

- 1) Housing development planning (National and DKI Jakarta)
- 2) Interpretation of the National and Municipal Plans and Programmes related to the Study Area such as Jabotabek Metropolitan Development Plan, and DKI Jakarta Master Plan 2005.
- 3) Review of the Ex-airport (Zone 1) Development Plan, titled Kemayoran Complex Master Plan (KC Master Plan).



## 2. CHARACTERISTICS OF THE STUDY AREA

### 2.1 National Policy of Housing Development

The interpretation of the National Development Policy of Housing and Settlement Sector in Repelita V is summarized as follows.

#### 1) Building of Housing

- The standard floor area of individual house shall be maintained between 12 m<sup>2</sup> and 70 m<sup>2</sup>.
- The flat house with a unit floor area of 18 m<sup>2</sup> to 54 m<sup>2</sup> shall be promoted in the renewal area.
- "Site and Service" and "Rent House" initiated by the government shall be promoted for the lower income group.
- Efforts shall be made on mobilization of "Community Development Funds" to increase financial resources.

#### 2) Environment Improvement

- Kampung Improvement Programme (KIP) shall be continued with more attention toward community participation to improve living environment.
- Guidelines shall be applied to induce and control population density, building heights, building coverage ratio and floor area ratio.

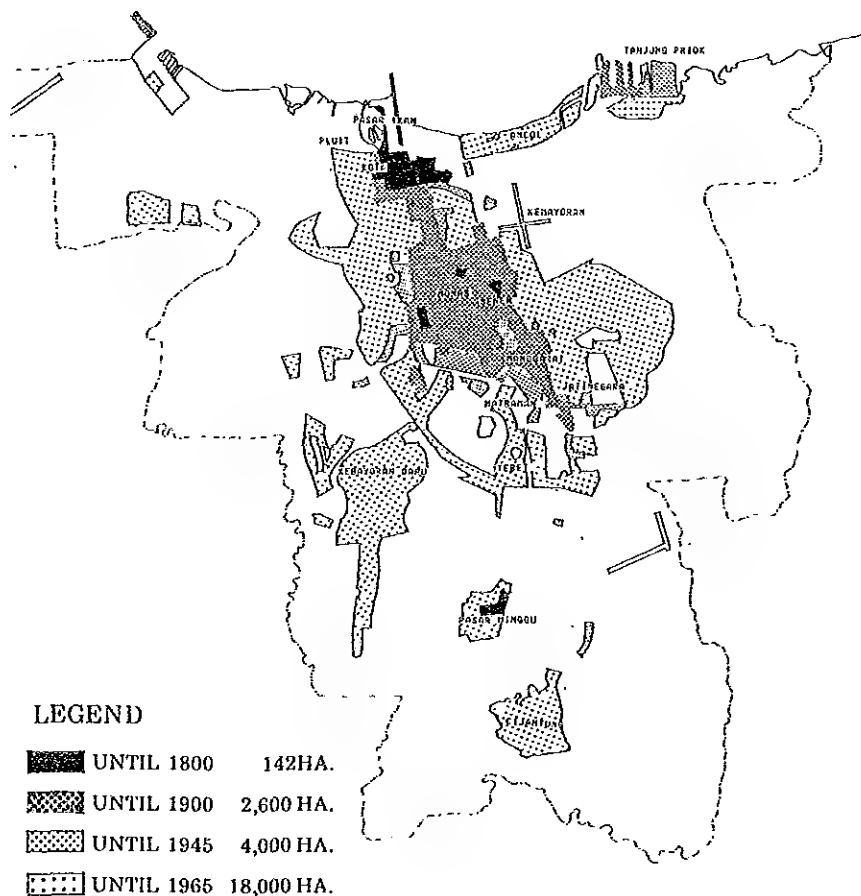
#### 3) Renewal

- Renewal shall be carried out by partly or totally demolishing existing structures in order to make way for planned new buildings and infrastructure. Priority shall be given to the original inhabitants to resettle in the same area after renewal is completed.
- Urban renewal is conducted by rearranging the land. Land consolidation aims to improve land utilization which was not well regulated and lead to deterioration.
- Benefits of urban renewal rest in the improvement of old buildings, more effective utilization of land, provision needed infrastructure, and realization city planning.

- Renewal shall be financed by by private sector in cooperation with the local community guided by the government.

### 2.1.2 Urban Growth

Jakarta founded in 1527, has developed as the capital city of the Republic of Indonesia. Particularly its rapid growth in the twentieth century (population increase ratio in the 1960s is over 4%, 1980s 3% and 1990s less than 2.5%) is substantially considerable, which implies both the positive and negative aspects toward further growth in the twenty first century. The city of Jakarta has been expanding in the southern direction, due to the location of Kamayoran airport, built in 1940, which was an obstacle against urban expansion in the eastern direction, and the hindered expansion in the northern direction due to the low coastal wide strip located there. The release of the Kemayoran ex-airport site for the establishment of various land use activities provides tremendous opportunities for fulfil many of Jakarta's urban development needs.



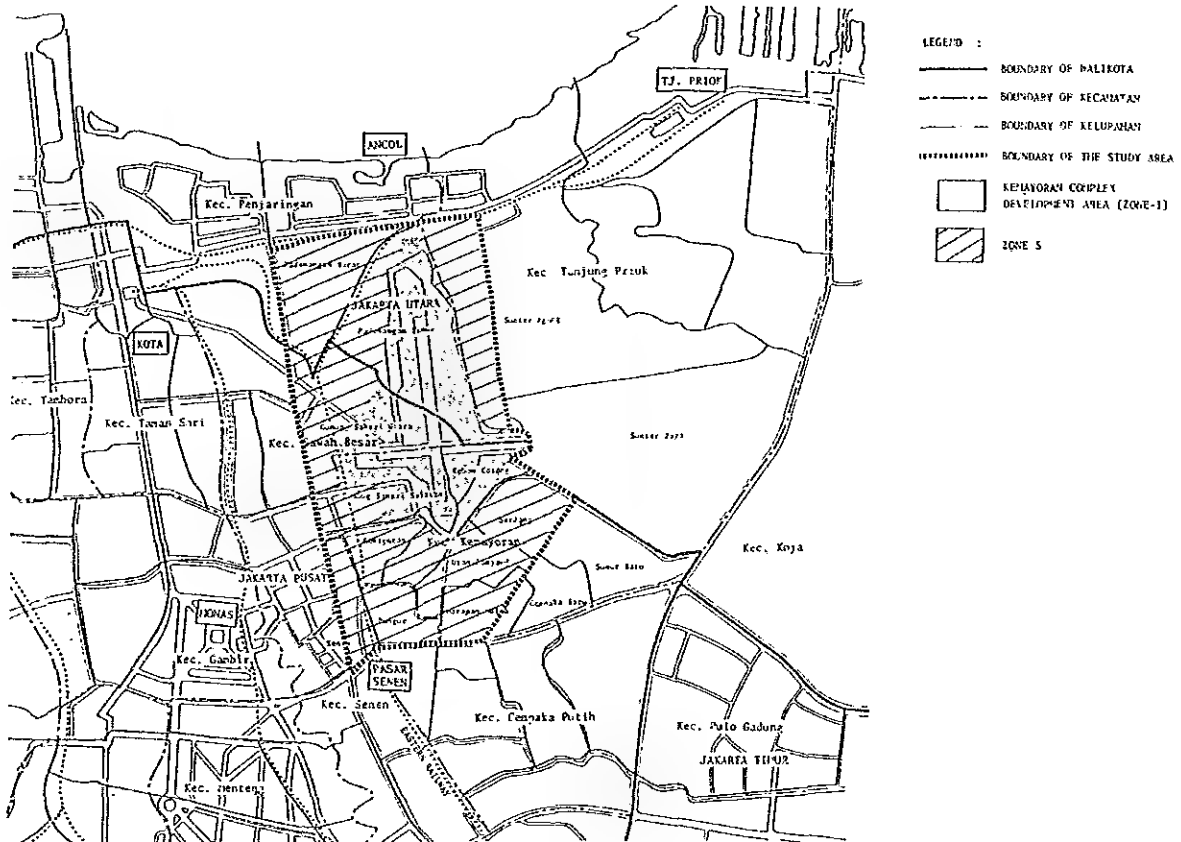


## 2.2

The area surrounding the Study Area is highly urbanized and includes Kota primary commercial center, Pasar Senen secondary commercial center, the national monument Monas with government buildings and extending to the central business district (CBD) along Jl. Thamrin and J. Sudirman. On the other hand, development in the surrounding area is in the early stages because of the aforementioned reasons. There is no green area between Monas and the large recreation site, Ancol, located at the northern coast.

The housing and environmental situation in Zone 5 is that prevailing in most parts of Jakarta, i.e., "Poor housing in poor environment", and the general image of Kemayoran area is not so good.

The strategic location of Zone 1 and the existing urban conditions surrounding it, ensure that Zone 1 development can strongly contribute to furthering the urban development of Jakarta City.

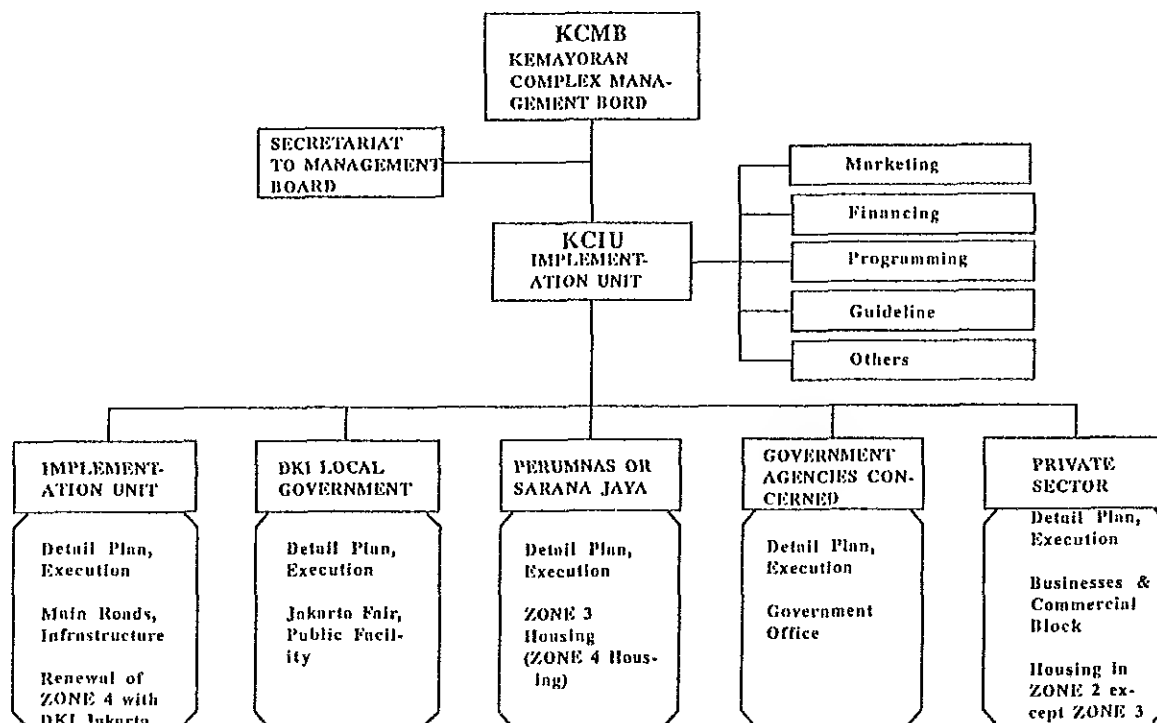


### 3. ZONE 1 (EX-AIRPORT SITE ) DEVELOPMENT

#### 3.1 BACKGROUND OF ZONE 1 DEVELOPMENT

Kemayoran Complex Management Board (KCMB) for the ex-airport area development was established in 1985 under the Presidential decree and the conceptual plan has been prepared. The Master Plan of the project (KC Master Plan) was prepared in 1987 by DJCK at the request of KCMB. This KC Master Plan is one of the most basic premises of the JICA Study. DJCK has been involved in the preparation of technical matters for the project, however the project has since been returned to Kemayoran Complex Implementation Unit (KCIU) which commenced activity as of January, 1989.

The extensive land area of Zone 1 is mostly owned by the government, and has been transferred to KCMB/KCIU. The basic idea of the development designates: KCMB to set up the general policy and KCIU to implement the land infrastructure development and coordinate with other developers as shown in the chart.



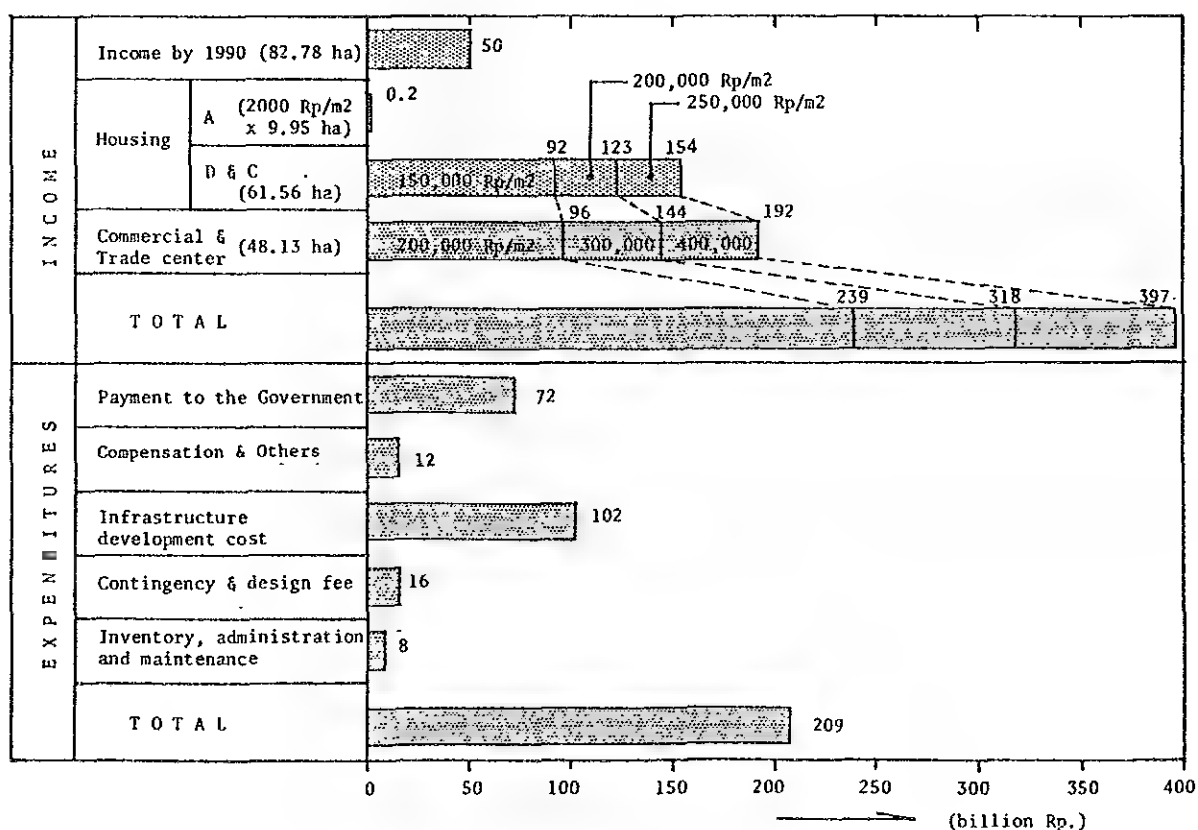
### 3.2 DEVELOPMENT FRAMEWORK

The most significant point in the development is that the Project should be "Self Financial".

All the development costs of road, infrastructure and others under KCIU's responsibility shall be borne by selling the government owned land to other developers. Therefore there is no need to request any financial aid from others.

| Development Component | Land Use Composition | Salable Price/m <sup>2</sup> |
|-----------------------|----------------------|------------------------------|
| Housing: by Private   | 98.81 ha.            | Rp. 250,000 (61.56 ha.)      |
| by Perumnas           | 30.00 ha.            | Rp. 2,000                    |
| Zone 4                | 9.95 ha.             | Rp. 2,000 probably           |
| Roads                 | 102.70 ha.           | -                            |
| Green, Urban Forest   | 81.30 ha.            | -                            |
| Jakarta Fair          | 57.40 ha.            | Rp. 75,000                   |
| Commercial & Services | 53.54 ha.            | Rp. 400,000                  |
| Public Facility       | 10.62 ha.            | -                            |
|                       | 444.32 ha.           | Total Rp. 396.5 billion      |

The estimated total profit within 10 years is Rp. 187 billion which will be partially used for low income group housing outside Zone 1.

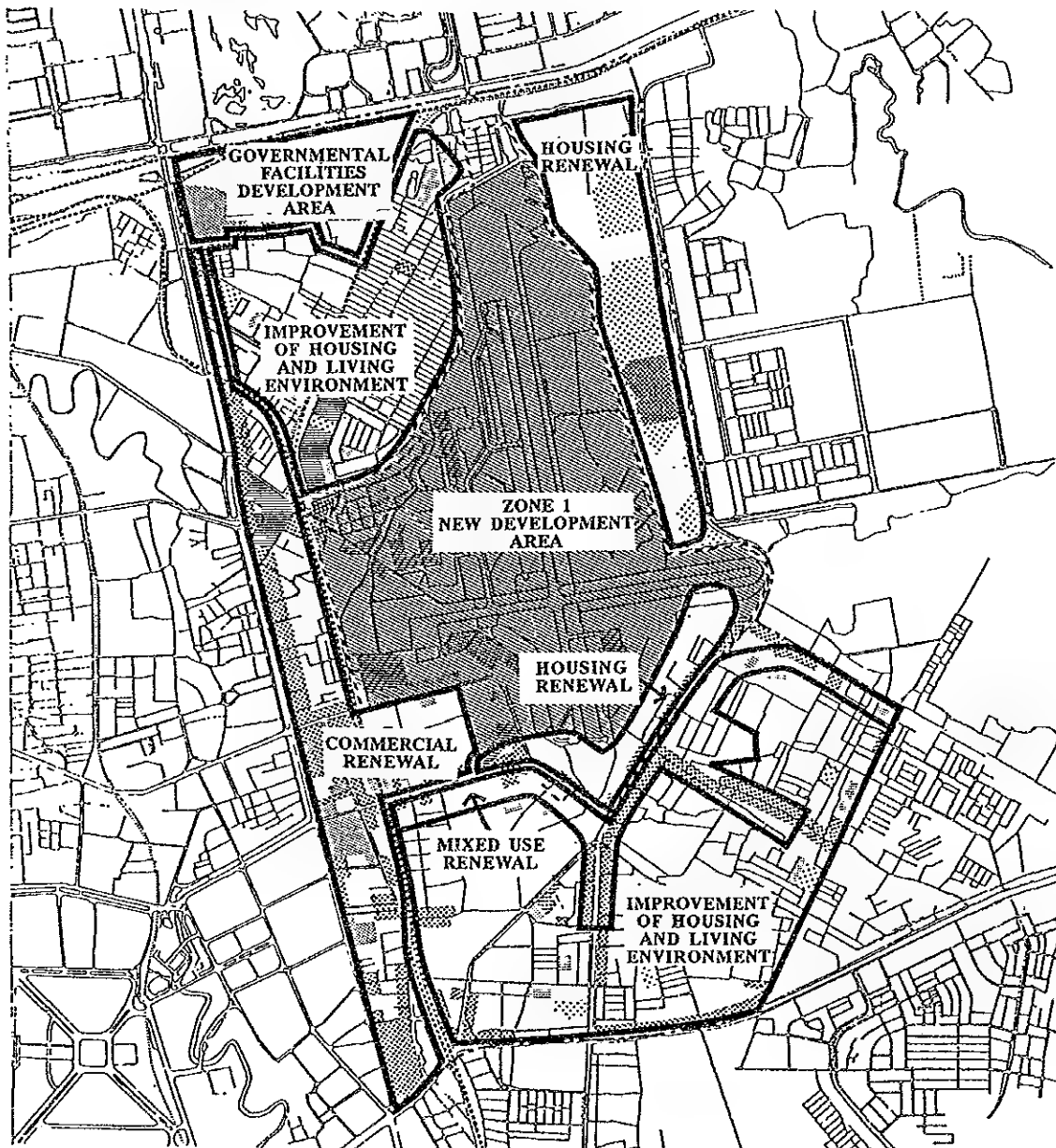


#### 4. HOUSING RENEWAL OF THE STUDY AREA

##### 4.1 HOUSING RENEWAL IN ZONE 5

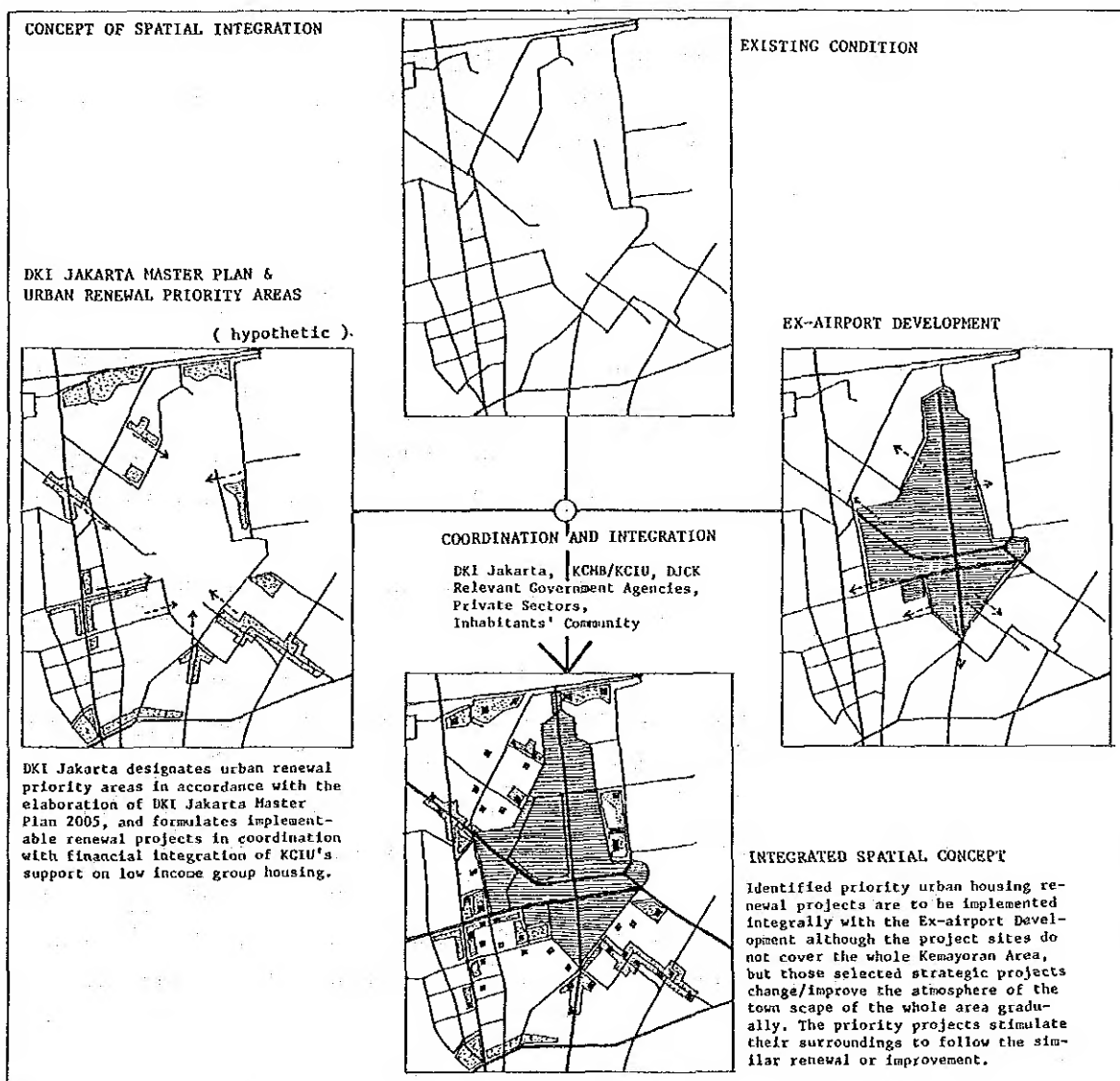
The map shown below illustrates the general policy of urban housing renewal in Zone 5 and Zone 4.

The population of the Study Area was 423,860 in 1987, and is forecast to reach 548,600 in 2005, includes the planned population of 96,000-140,000 in Zone 1 and projected population of 480,000 in Zone 5 based on an increase ratio of 7% during 1980-2005. The population density (gross) of Zone 1 is 120-200 persons/ha. and average 300-450 persons/ha. for Zone 5.



#### 4.2 INTEGRATED ZONE 1 DEVELOPMENT AND ZONE 5 RENEWAL

Both Zone 1 development and Zone 5 renewal shall be executed integrally and systematically. Physical impacts of Zone 1 on Zone 5 shall be identified and they shall be coordinated with priority renewal area designated by the Municipality. It is essential to establish an authority or coordination committee among DJCK, KCMB/KCIU, DKI Jakarta Municipality and other relevant government agencies concerned. Private sectors and inhabitants' community shall be encouraged to motivate renewal projects, thus, gradual but strategic integration will be realized.



#### 4.3 KCIU FUND

As mentioned in 3.2, KCMB/KCIU will presumably gain Rp. 187 billion through Zone 1 development. A part of it, for instance Rp. 70 billion, will be used for assisting low income group housing renewal outside Zone 1. This amount shall be used to establish the KCIU Fund, as proposed in this Study. It is divided into (1) Rp. 20 billion for grant aid and (2) Rp. 50 billion to support 30% of cost for 10,000 housing units of F-27 (flat) and the first loan disbursement for another 10,000 housing units respectively.

Grant and/or loan eligibility criteria are proposed as follows:

- 1) Development/improvement of low income group housing
- 2) Participation of community/cooperative which comprise inhabitants and land owners
- 3) Participation of public sector
- 4) Project area with more than 5,000 m<sup>2</sup>
- 5) Others

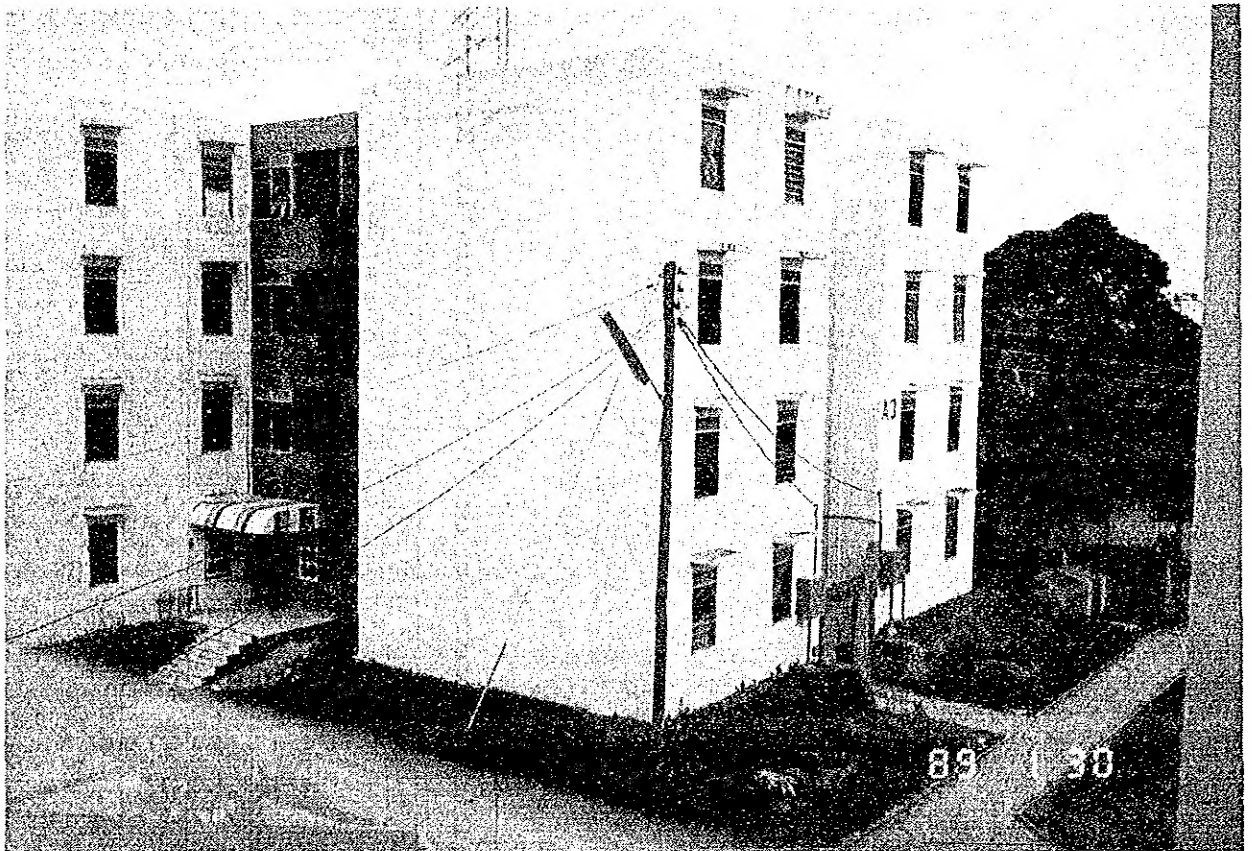
#### 4.4 STRATEGY OF DEVELOPMENT AND RENEWAL

In order to realize the concept of spatial integration of Zone 1 development and Zone 5 renewal, the following should be considered:

- 1) Establishment of an authority and/or coordination committee
- 2) Realization of KCIU Fund
- 3) Coordination of DKI Jakarta Master Plan and KC Master Plan with respect to specific plans and programmes, and identification of priority renewal areas
- 4) Encouragement private sector and inhabitants' community and formulation of small size urban housing renewal projects
- 5) Strategically locating projects in such a manner that they stimulate surrounding areas and produce with the inhabitants of these areas a desire to improve or renew their housing and environment.

# CHAPTER III

## INTEGRATED DEVELOPMENT PLAN OF ZONE 2

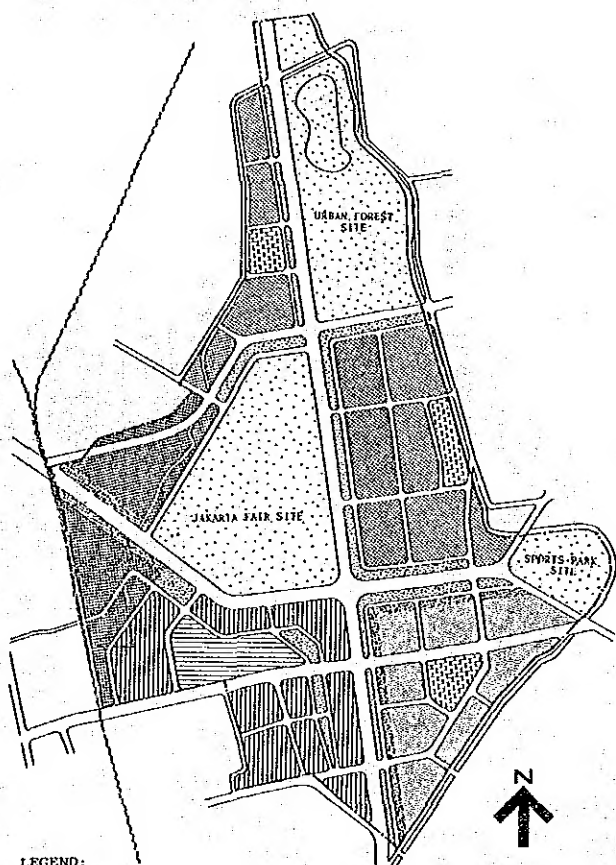


# 1. GENERAL FRAMEWORK

Zone 2 of approx. 133.4 ha. including built-up areas was designated in KC Master Plan for housing and neighborhood facility development. The Master Plan was reviewed and adjusted on land use lay-out, distribution of population, and population density.

The development will be implemented by (1) private developers for high and middle class housing guided by KCIU, (2) Perumnas for middle and low income groups, (3) KCIU in coordination with DKI Jakarta Municipality for built-up areas' housing renewal, and (4) DKI Jakarta Municipality for neighborhood facilities.

Proposed Layout Zone 2



LEGEND:

- High Class Housing Area
- Middle Class Housing Area
- Middle & Low Class Housing Area
- Commercial Area
- Governmental Office Area
- Neighbourhood Facility Area
- Greenery Openspace Area
- Roadside Green Area
- Road Area
- Commercial & Residential Mixed Area

Distribution of Population in Zone 2

| LOCA-<br>TION | CLASSIFICA-<br>TION<br>OF HOUSE | SITE<br>AREA<br>(Ha) | POPULATION    |               | HOUSE         |               | TOTAL<br>FL AREA<br>(M2) | FAR<br>(%) |
|---------------|---------------------------------|----------------------|---------------|---------------|---------------|---------------|--------------------------|------------|
|               |                                 |                      | DNSTY<br>NOS. | DNSTY<br>NOS. | DNSTY<br>NOS. | DNSTY<br>NOS. |                          |            |
| H-1           | HIGH CLASS                      | 20.01                | 220           | 4,400         | 44            | 876           | 60,000                   | 0.30       |
|               | MID. CLASS                      | 24.91                | 435           | 10,850        | 87            | 2,170         | 144,000                  | 0.58       |
|               | SUB TOTAL                       | 44.92                | 340           | 15,250        | 68            | 3,050         | 204,000                  | 0.46       |
| H-2           | MID. CLASS                      | 16.64                | 705           | 11,750        | 141           | 2,350         | 147,000                  | 0.88       |
|               | HIGH CLASS                      | 9.88                 | 495           | 4,900         | 99            | 980           | 112,000                  | 1.12       |
|               | EXISTING                        | 18.10                | 200           | 3,600         | 40            | 720           | 61,000                   | 0.34       |
| H-3           | SUB TOTAL                       | 27.98                | 300           | 8,500         | 60            | 1,700         | 173,000                  | 0.62       |
|               | SUB ZONE(2)                     | 30.00                | 1,000         | 30,000        | 200           | 6,000         | 205,000                  | 0.68       |
|               | SUB ZONE(3)                     | 9.95                 | 660           | 6,600         | 130           | 1,300         | 55,000                   | 0.55       |
| H-4           | ANGKASA PURA                    | 3.90                 | 180           | 700           | 36            | 140           | 12,000                   | 0.31       |
|               | SUB TOTAL                       | 43.85                | 850           | 37,300        | 170           | 7,440         | 272,000                  | 0.75       |
|               | SUB TOTAL                       | 133.39               | 545           | 72,000        | 109           | 14,540        | 796,000                  | 0.60       |
| TOTAL         |                                 |                      |               |               |               |               |                          |            |